Abstracts of recent articles of interest to the patient safety community selected by the NPSF Information Resources Center. Published twice a month by the National Patient Safety Foundation.

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19. Ten Thousand Hours to Patient Safety, Sooner or Later
   Reiter CE III, Pichert JW, Hickson GB.
   Progress Pediatr Cardiol. 2012(Jan); 33(1):37–45.
   This article discusses the issue of disruptive behavior among health care professionals and offers guidance designed to assist individuals and organizations in dealing with such behavior. The authors present a set of principles for promoting professionalism along with recommended actions for addressing unprofessional behavior, using a clinical vignette to illustrate their discussion. One figure and 1 table are included.

2. Adverse Events and Safety Issues in Blood Donation—A Comprehensive Review
   Amrein K, Valentin A, Lanzer G, Drexler C.
   Blood Rev. 2012(Jan); 26(1):33–42.
   Although blood donation generally poses little risk to donors, a variety of adverse events related to the procedure can occur. This article provides a comprehensive overview of the risks associated with blood donation and offers recommendations for improving donor safety. Four tables are included.

   Lucchiari C, Pravettoni G.
   This article provides an overview of evidence and theory concerning the role of cognitive processes in the occurrence and prevention of diagnostic error. The authors suggest that fuzzy cognitive maps may provide a useful tool for helping providers to conceptualize the mental processes involved in diagnostic reasoning and increasing their awareness of the processes that contribute to error. One table and 1 figure are included.

4. Comprehensive Perinatal Safety Initiative to Reduce Adverse Obstetric Events
   This article describes the design and implementation of a multifaceted initiative to improve safety of care for obstetric patients at a large tertiary medical center. Reductions in rates of obstetric adverse outcomes as well as improvements in staff and patient perceptions of safety were observed following implementation of the initiative. Four tables and 8 figures are included.

5. Do Older Patients’ Perceptions of Safety Highlight Barriers That Could Make Their Care Safer during Organisational Care Transfers?
   Scott J, Dawson P, Jones D.
   BMJ Qual Saf. 2012(Feb); 21(2):112–117.
   Abstract available at: http://qualitysafety.bmj.com/content/21/2/112.abstract
   This study explored whether patients’ accounts of their health care experiences could provide insights into improving safety in transitions of care. Using data from in-depth interviews conducted with 14 patients treated at UK health care organizations, the authors identify four important themes and discuss how this information might be applied to efforts to engage patients in risk reduction efforts. One table and 1 figure are included.

6. Electronic Health Record-Based Surveillance of Diagnostic Errors in Primary Care
   BMJ Qual Saf. 2012(Feb); 21(2):93–100.
   Full text available at: http://qualitysafety.bmj.com/content/21/2/93.full
   This study investigated whether a method involving automated screening of electronic health records (EHRs) could provide an effective means of identifying diagnostic errors in the primary care setting. The authors developed and evaluated a computerized process to screen patient records for “triggers”—patterns of health care visits indicating that a diagnostic error might have occurred—and applied the method in an analysis of EHR data from 2 large health care systems. On the basis of their findings, the authors conclude that such a method can be of considerable assistance, although identification of diagnostic errors remains a challenging task. Three tables and 2 figures are included.

7. Error Training: Missing Link in Surgical Education
   DaRosa DA, Pugh CM.
   Surgery. 2012(Feb); 151(2):139–145.
   Available (subscription required) at: http://www.surgjournal.com/article/S0039-6060(11)00474-0/fulltext
   This article articulates the rationale for providing surgical trainees with formal education about the occurrence and prevention of errors and describes possible approaches to incorporating error training in surgical residency curricula. One table is included.

Bagian JP.


This article emphasizes the need for a systems-based approach to understanding and remedying deficiencies in the safety and quality of health care and illustrates opportunities to apply human factors engineering to efforts to improve health care delivery and patient safety. Three figures are included.


Findings from a variety of research suggest that the quality and safety of surgeons’ performance may be significantly affected by nontechnical skills such as teamwork, interpersonal communication, and ability to manage stress, but few studies have attempted to assess this evidence systematically. In this review of 28 articles, the authors find evidence to support the connection between a variety of nontechnical skills and aspects of technical performance in surgery, but they note that the precise mechanisms underlying this relationship remain unclear. Three tables and 1 figure are included.

10. Implementation of a “No Fly” Safety Culture in a Multicenter Radiation Medicine Department

Potters L, Kapur A.

Full text available at: [http://www.practicalradonc.org/article/51879-8500%2811%292000164-0/fulltext](http://www.practicalradonc.org/article/51879-8500%2811%292000164-0/fulltext)

This article describes how quality improvement techniques were applied to standardize performance and improve safety of patient care in a large, multilocational radiation therapy department. Three tables and 1 figure are included.

11. Learning from Accident and Error: Avoiding the Hazards of Workload, Stress, and Routine Interruptions in the Emergency Department

Morrison JB, Rudolph JW.
*Acad Emerg Med*. 2011(Dec); 18(12):1246–1254.


This article explores how knowledge derived from the study of organizational accidents might be applied to efforts to ensure patient safety and quality of care in the emergency department setting. The authors use a previously developed theoretical model to illustrate how the collective impact of a series of minor interruptions to workflow can precipitate catastrophic events. Examining implications of this analysis for emergency medicine, the authors urge awareness of these systemic vulnerabilities, cautioning that conditions such as chronic overcrowding may bring emergency departments to a “tipping point” of dangerous proximity to crisis. Four figures are included.

12. Monitoring Universal Protocol Compliance through Real-Time Clandestine Observation by Medical Students Results in Performance Improvement

Logan CA, Cressey BD, Wu RY, et al.


This article describes how an academic medical center used covert observation by medical students as a means of assessing and improving operating room staff’s adherence to surgical safety procedures. Two tables are included.

13. Parents and Families as Partners in the Care of Pediatric Cardiology Patients

Haskell H, Mannix ME, James JT, Mayer D.


This article describes the role that parents and families play in the care of pediatric cardiology patients and discusses strategies and tools that care providers can employ to promote effective involvement of and collaboration with family members.

14. Possible Solutions for Barriers in Incident Reporting by Residents

Martowirono K, Jansma JD, van Luijk SJ, Wagner C, Bijnen AB.


This study sought to provide insight into factors that could promote or inhibit incident reporting among medical residents. Using data from focus groups conducted with 22 residents at a Dutch teaching hospital, the authors identify a variety of perceived barriers to reporting as well as suggested solutions to these obstacles. Four tables and 1 figure are included.

15. Preceptorship: Using an Ethical Lens to Reflect on the Unsafe Student

Earle-Foley V, Myrick F, Luhanga F, Yonge O.
*J Prof Nurs*. 2012(Jan–Feb); 28(1):27–33.


Many health care educational programs include a preceptorship phase, a period of training during which students gain
clinical experience by providing patient care under the supervision of a more senior practitioner. This article examines the challenges that preceptors face when a student acts unprofessionally or fails to meet standards of safe practice. The authors draw on several ethical theories to offer guidance for dealing with this issue, considering the obligations of preceptors both as educators and as stewards of patient safety.

16. Preventability of Adverse Drug Events Involving Multiple Drugs Using Publicly Available Clinical Decision Support Tools

Am J Health-Syst Pharm. 2012(Feb 1); 69(3):221–227.
Abstract available at: http://www.ajhp.org/content/69/3/221.

This study examined adverse drug events (ADEs) involving multiple drugs in the community hospital setting, using data collected from six hospitals in Massachusetts as part of a previous study. The study analyzed the frequency and characteristics of ADEs and assessed whether identified events could have been prevented through the application of knowledge derived from public drug-safety databases, which provide information on drug–drug interactions and other problems that may occur with the use of multiple medications. On the basis of their analysis, the authors conclude that such events occur relatively frequently in this setting and that many of these events could be prevented through the use of publicly available clinical decision support tools. Three tables are included.

17. Root Causes of Errors in a Simulated Prehospital Pediatric Emergency

Lammers R, Byrwa M, Fales W.
Acad Emerg Med. 2012(Jan); 19(1):37–47.

This study examined errors occurring during prehospital emergency care of pediatric patients, seeking to shed light on the causes and circumstances of errors in this setting. In an analysis involving emergency medical services (EMS) personnel from 5 US agencies, study subjects participated in a simulated pediatric medical emergency and underwent post-simulation debriefings designed to elicit information about the sources of observed errors. The authors discuss important themes that emerged in the analysis and comment on the value of simulation as a research tool, particularly in settings such as EMS care where direct observation of actual practice is difficult. One table and 2 figures are included.

18. Surgical Count Practice Variability and the Potential for Retained Surgical Items

Edel EM.
AORN J. 2012(Feb); 95(2):228–238.
Abstract available at: http://www.aornjournal.org/article/S0001-2092%2811%2902145-2/abstract

This article describes how one hospital took steps to assess and improve operating room staff’s performance of surgical counts, a safety measure that provides an important defense against accidental retention of surgical items. The project involved identifying variations in count practices and the introduction of new policy to encourage adherence to a standardized procedure. Two tables and 1 figure are included.

19. Ten Thousand Hours to Patient Safety, Sooner or Later

Pellegrini VD Jr.
Acad Med. 2012(Feb); 87(2):164–167.
Full text available at: http://journals.lww.com/academicmedicine/Fulltext/2012/02000/Perspective___Ten_Thousand_Hours_to_Patient.13.aspx

In this perspective article, the author takes a critical look at the academic medical community’s “preoccupation” with the issue of resident duty-hour restrictions, arguing that a fixation on work hours has obscured the need to address broader issues of patient safety in graduate medical education. As an alternative, he advocates adoption of an approach based on 3 fundamental components of safe and professional practice—capacity, commitment, and competence—and illustrates how patient safety improvement efforts could be aligned with this framework.


Bakdash JZ, Drews FA.

This article explores how ergonomic design of medical equipment could help to prevent errors and improve patient safety, focusing on the prevention of central line–associated bloodstream infections (CLABSI) as an example. The authors describe ways in which the design and packaging of central-line equipment could be engineered to provide built-in “checklists” that would encourage adherence to correct insertion and maintenance procedures, decreasing reliance on human vigilance and reducing the risk for errors or lapses in safety. Four figures are included.